



# UNITED STATES PATENT AND TRADEMARK OFFICE

UNITED STATES DEPARTMENT OF COMMERCE  
United States Patent and Trademark Office  
Address: COMMISSIONER FOR PATENTS  
P.O. Box 1450  
Alexandria, Virginia 22313-1450  
www.uspto.gov

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/669,707	09/26/2000	Donald L. Mobley	8266-0474	5523
25267	7590	05/13/2004	EXAMINER	
BOSE MCKINNEY & EVANS LLP 135 N PENNSYLVANIA ST SUITE 2700 INDIANAPOLIS, IN 46204			GIBSON, RANDY W	
		ART UNIT		PAPER NUMBER
		2841		

DATE MAILED: 05/13/2004

Please find below and/or attached an Office communication concerning this application or proceeding.

<b>Office Action Summary</b>	<b>Application No.</b>	<b>Applicant(s)</b>
	09/669,707	MOBLEY ET AL.
	<b>Examiner</b>	<b>Art Unit</b>
	Randy W. Gibson	2841

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --  
Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

## Status

1)  Responsive to communication(s) filed on 29 April 2004.

2a)  This action is **FINAL**.                    2b)  This action is non-final.

3)  Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

## **Disposition of Claims**

4)  Claim(s) 1-65 is/are pending in the application.  
4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.

5)  Claim(s) 28,34,35 and 45-51 is/are allowed.

6)  Claim(s) 1-5,7,9-27,29-33, 36-44, and 52-64 is/are rejected.

7)  Claim(s) 6,8 and 65 is/are objected to.

8)  Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

## Application Papers

9)  The specification is objected to by the Examiner.

10)  The drawing(s) filed on 15 October 2002 is/are: a)  accepted or b)  objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).

11)  The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

**Priority under 35 U.S.C. § 119**

12)  Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).  
a)  All b)  Some \* c)  None of:  
1.  Certified copies of the priority documents have been received.  
2.  Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.  
3.  Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

**Attachment(s)**

1)  Notice of References Cited (PTO-892)  
2)  Notice of Draftsperson's Patent Drawing Review (PTO-948)  
3)  Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)  
Paper No(s)/Mail Date 4/29/04.

4)  Interview Summary (PTO-413)  
Paper No(s)/Mail Date. \_\_\_\_\_  
5)  Notice of Informal Patent Application (PTO-152)  
6)  Other: \_\_\_\_\_

## DETAILED ACTION

### ***Response to Arguments***

Applicant's arguments filed April 29, 2004 have been fully considered but they are not persuasive with respect to some of the claims.

With respect to the rejection of claim 1 over Welvaarts (EP 0744598 A1), applicant makes the following argument:

Claim 1 requires and Welvaarts fails to teach or disclose the combination including "...a space being defined between the stud and the mount to permit relative movement between the stud and the mount . . ." Note that connecting piece 10 of Welvaarts is positioned between sleeve-shaped means 8 and the end of load cell 2."

Exactly what is the significance of this observation does not seem to explained.

Welvaarts still seems to meet the claimed limitation that there be a space defined between the stud and the mount to permit relative movement between them:

"The inner circumference of sleeve-shape means 8 and the side of wall 9 facing the inside of sleeve-shaped means 8 are spaced from the outer circumference of the end of pressure force indicator 2, and the space thus formed is filled by a connecting piece 10 consisting of a resilient material, for example rubber or plastic material, which is confined between the horizontal and vertical boundary surfaces of sleeve-shape means 8 and pressure force sensor 2. [emphases added]" (Welvaarts, Col. 2, lines 37-45)

Similar language is found in column 3, lines 13-25 which describes the second embodiment. There seems to be an express recitation in Welvaarts of a space between mount 8 and the stud 2, which is filled with a resilient material 10 to allow some degree of movement -- since a resilient material has some give to it by definition. The applicant did not define the term "stud" in the claim, so the examiner assumed that the end of the load cell in the first embodiment is considered a stud. In the alternative, the examiner notes that in the second embodiment, the bolt 11 is obviously a "stud" in the same sense that the applicant has defined it in his own specification (p. 6, line 29 to p. 7, line 1).

With respect to claim 12, applicant states that "[a]s described in the last paragraph of column 2 of page 2 of Welvaarts, connecting piece 10 does not transfer all force between load cell 2 and sleeve-shaped means 8." The examiner disagrees that this is what Welvaarts meant when his statements are taken in context with the rest of the paragraph which extends onto page 3. Welvaarts states that "at least the larger part of the load to be weighed ... will be transferred to the pressure force indicator". Non-vertical forces (I.E.: forces caused by something other than gravity) are supposed to be absorbed by resilient connector 10. The ordinary practitioner would have known that what Welvaarts means by "at least" is that overload forces are absorbed by some conventional means as is known in the art; the ordinary practitioner would have known that if any of the weight was supported by a structural element other than the load cells, then the device would be inoperative since there would be no practical way of knowing what percentage of the weight was actually being measured (by being supported by the

sensing load cells), and what percentage of the weight is not being measured (since some of the weight would have been by-passing the load cells through some non-sensing structural element). If applicant is trying to argue that his load cell measures all forces, this argument is contradicted by his own specification which admits that overload protection is well known in the art (p. 8, line 28 to p. 9, line 1). If applicant is trying to argue that his load cell measures all non-vertical forces, this argument is also contradicted by his own specification since the purpose of the disclosed lubricating liner is obviously intended to allow the load cell to move back & forth in the horizontal direction to a limited extent in response to horizontal forces (p. 8, lines 14-18). Applicant also states that the examiner has failed to identify which structure of Welvaarts corresponds to a stud including a circular portion. This structure seems self evident from Figure 2 of Welvaarts which shows a bolt 11 and a circular bearing 6; see column 3, lines 13-25.

Applicant's argument with regards to claim 22 that the central axes of the "circular portion" does not extend in the horizontal direction is not understood since the axes of the ball bearing 6 shown in Figures 1 & 2 could conceivably point in any direction (it is a sphere, after all -- exactly defines the direction of an imaginary line (an axes) running through the center is not explained).

Applicant makes similar arguments with regards to claim 23; these arguments are unpersuasive for the same reasons mentioned above.

Applicant's arguments with regards to claim 26 are similar to the ones made with respect to claim 1 and are unpersuasive for the same reasons mentioned above.

Applicant's arguments with respect to claim 36 are repeats of his other arguments rebutted above and are unpersuasive for the same reasons.

With respect to the rejection of claim 40 over Welvaarts (EP 0744598 A1), applicant makes the following argument:

"Note that in Welvaarts, the load to be weighed is placed on an auxiliary frame at least partially formed by sleeve-shaped means 8 and wall 9 (see page 2, column 2, lines 46-48) and load cell 2 is coupled to frame 1, not sleeve-shaped means 8 or wall 9."

The examiner cannot follow the applicant's logic here, and the reference to the paragraph in column 2 of Welvaarts does not seem to help. The load cell of Welvaarts is "coupled" to the auxiliary frame (see column 1, lines 3-13) in the same sense that applicant's own load cell is "coupled" to his weigh frame:

"Fig. 5 is a partial sectional view of the base frame and weigh frame showing the load cell coupled to the elongated mounting bar which is coupled to a frame member of the weigh frame and showing the stud extending from the cell block to engage the liner which is mounted in the bore of the mounting member [emphases added]". (from applicant's specification, p. 3).

The word "coupled" is a general word that simply means attached in some way; it is unclear why applicant's load cell is considered to be "coupled" to his weigh frame while the load cell of Welvaarts is not considered to be "coupled" to his auxiliary frame (exactly what structural difference is being claimed is not explained).

Applicant's arguments with respect to claim 44 have already been addressed above and do not need to be repeated.

***Claim Rejections - 35 USC § 102***

The text of those sections of Title 35, U.S. Code not included in this action can be found in a prior Office action.

Claims 1-5, 7, 9-11, 22-27, 29, 30-33, 36-44, and 52-64 are rejected under 35 U.S.C. 102(b) as being anticipated by Welvaarts (EP 0744598 A1). Welvaarts discloses a load cell block (2) that has an end pad (IE: "stud") which is inserted into a mount (8) which has an internal liner (10). Exactly whether the relative term "more lubricous" is actually limiting in a patentable sense is debatable, but nonetheless, the examiner notes that plastic material would appear to have a lower coefficient of friction than ceramic or steel depending on the type of surface treatment or finish applied to the load cell block.

***Claim Rejections - 35 USC § 103***

The text of those sections of Title 35, U.S. Code not included in this action can be found in a prior Office action.

Claims 12-21 are rejected under 35 U.S.C. 103(a) as being unpatentable over Carruth et al (US # 4,874,692) in view of Welvaarts (EP 0744598 A1). Carruth et al disclose the claimed invention (Fig. 3) except that their load cell is mounted slightly differently between the two hospital bed frames than the load cell as claimed. However, the mounting of a load cell between two frames in the manner claimed is shown by

Welvaarts. It would have been obvious to the ordinary practitioner to mount the load cell of Carruth et al in the manner specified by Welvaarts based on its known suitability for its intended use. See *Ryco, Inc. v. Ag-Bag Corp.*, 857 F.2d 1418, 8 USPQ2d 1323 (Fed. Cir. 1988); and, MPEP § 2144.07.

### **Conclusion**

Claims 6, 8, and 65 objected to as being dependent upon a rejected base claim, but would be allowable if rewritten in independent form including all of the limitations of the base claim and any intervening claims. Claims 28, 34, 35, and 45-51 are allowable over the art of record.

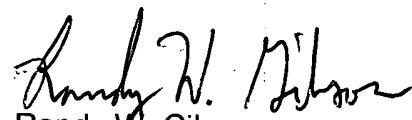
Applicant's amendment necessitated the new ground(s) of rejection presented in this Office action. Accordingly, **THIS ACTION IS MADE FINAL**. See MPEP § 706.07(a). Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the date of this final action.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Randy W. Gibson whose telephone number is (571) 272-2103. The examiner can normally be reached on Mon-Fri., 9-5.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, David S Martin can be reached on (571) 272-2107. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).



Randy W. Gibson  
Primary Examiner  
Art Unit 2841